

Date of Application, 10th Mar., 1888
Complete Specification Left, 4th Dec., 1888
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RECORDED

A.D. 1888, 10th MARCH. N° 3754.

PROVISIONAL SPECIFICATION.

An Improvement in Brewing.

I, BASIL WILLIAM VALENTIN of Aston Brewery, Birmingham, Brewer do hereby declare the nature of this invention to be as follows :—

- When wort is drawn off from the mash tun it generally holds in solution certain nitrogenous substances, which, unless they are removed, tend to make the beer turbid, and to cause deposit in bottles or other vessels in which the beer is stored. My invention relates to a simple means of getting rid of the most objectionable of these substances. I proceed in the following manner :—When the wort leaves the mash tun usually at a temperature of 140° to 150° F. it contains the nitrogenous substances in a dissolved or diffused condition. I draw the whole of this wort off, and heat it up to about 180° F., and by this means, besides ensuring a high proportion of dextrine, I effect a change in the nitrogenous matter, such that when the wort is again cooled to 150° F. or lower, this matter becomes separable from the wort. After having heated the wort to about 180° F. as above stated I cool it down again to 150° F. or lower, and pass it through the grains from which it was obtained. These act as a filter allowing the pure wort to pass through, but retaining the most objectionable of the nitrogenous substances.

Dated this 10th day of March 1888.

ABEL & IMRAY,
Agents for the Applicant.

426-16

1889

A.D. 1888.—N° 3754.

Valentin's Improvement in Brewing.

RECORDED

COMPLETE SPECIFICATION.

An Improvement in Brewing.

I, BASIL WILLIAM VALENTIN of Aston Brewery, Birmingham, Brewer, do hereby declare the nature of this invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement :—

When wort is drawn off from the mash tun, it generally holds in solution certain nitrogenous substances, which, unless they are removed, tend to make the beer turbid and to cause deposit in bottles or other vessels in which the beer is stored. 5

My invention relates to a simple means of getting rid of the most objectionable of these substances. I proceed in the following manner :—When the wort leaves the mash tun, usually at a temperature of 140° to 150° F., it contains the nitrogenous substances in a dissolved or diffused condition. I draw the whole of this wort off and heat it up to about 180° F., and by this means, besides ensuring a high proportion of dextrine, I effect a change in the nitrogenous matter, such that when the wort is again cooled to 150° F., or lower, this matter becomes separable from the wort. After having heated the wort to about 180° F., as above stated, I cool it down again to 150° F. or lower, and pass it through the grains from which it was obtained. These act as a filter allowing the pure wort to pass through, but retaining the most objectionable of the nitrogenous substances. 10 15

The treatment above described may be applied to the whole contents of the mash tun in bulk, but it is of advantage to treat successive portions of the contents, carrying on the process in a continuous manner by circulation of the wort from the mash tun, first through a vessel, coil or set of pipes, by which it is rapidly heated to about 180° F., then through another similar appliance by which it is rapidly cooled to 150° F. or lower, and finally to the sparger to be filtered through the grains. This circulation is continued until the wort is so far cleared of the nitrogenous substances that no farther coagulation takes place when it is heated to 180° F. 20 25

Having now particularly described and ascertained the nature of this invention and in what manner the same is to be performed, I declare that what I claim is :—

The process for clearing wort from certain impurities by heating, cooling and filtering, substantially as herein described. 30

Dated this 4th day of December 1888.

ABEL & IMRAY,
Agents for the Applicant.

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